

Work Order ID 140539

Thursday, January 07, 2016 1:25:42 PM

140539

Page 1

Item ID: D2622-120C

Revision ID:

Item Name: Step Extrusion

Start Date: 1/7/2016 Start Qty: 60.00

Required Date: 1/7/2016 Req'd Qty: 60.00

Reference:

N900040100

Setup Start ***NS1***

Stop ***NS2***

Cust Item ID:

Customer:

Approvals: Process Plan: MLJ Date: JAN 07 2016 Tooling: _____ Date: _____

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Run Start ***NR1***

Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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Draw Nbr	Revision Nbr
D2622	Rev C1

100	PURCHASING	0.00				DAS 13 9-89	JAN 15 2016		120
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100

Purchasing

Purchasing

Memo

Issue P/O: 31027 a) Extrude as per Dwg D2622 Rev. Cb)
Material: 6061-T6 (QQ-A-200/8)c) Minimum yield tensile strength = 35
ksid) Minimum ultimate tensile strength = 38 ksi e) Minimum elongation =
8%f) Order at 120" longg) Bon L Canada Inc.

110

Receive & Inspect for Damage & Mat'l Certs 0.00

110

Packaging

Packaging

Memo

Ensure material certification is attached

120

QC18 In-Coming Inspection Material 0.00

120

QC

Quality Control

Memo

Check Pull test per Dwg D2622 for compliance page attached Check hardness
with Webster tester

1318 Sp 16-03-22

(131) 16-03-24 DAS
9
9-89

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :				MRB (QSI042) Approval	
Description Work Order Deviation				Disposition				Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY							
Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐	No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐	Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐		Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐		Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐		Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐	
		OTHER : ☐							

Work Order ID 140539

140539

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Thursday, January 07, 2016 1:25:42 PM

Item ID: D2622-120C Accept *N900040100* Setup Start *NS1*
Revision ID: Stop *NS2*
Item Name: Step Extrusion
Start Date: 1/7/2016 Start Qty: 60.00 *60* Cust Item ID:
Required Date: 1/7/2016 Req'd Qty: 60.00 *60* Customer:
Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start *NR1*
QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop *NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
130	Identify as per dwg & Stock Location: <u>W44</u>	0.00							<u>DAB</u> <u>24</u> <u>9-00</u>
130									
Packaging	Memo	0.01							
Packaging	LOCATION : HALL								
140	QC21- Final Inspection - Work Order Release	0.00							
140									
QC	Memo	0.10							<u>MCS</u> MAR 30 2016
Quality Control									

MCS MAR 30 2016

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :				MRB (QSI042) Approval Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval	
Description Work Order Deviation				Disposition					

Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐				FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐							
OTHER : ☐											

Picklist Print

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Page 1

Work Order ID: 140539

140539

Parent Item: D2622-120C

D2622-120C

Parent Item Name: Step Extrusion

Start Date: 1/7/2016

Required Date: 1/7/2016

Start Qty: 60.00

Required Qty: 60.00

Comments:

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
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D2622-120CP

Purchased

No

110

Each

0.0000

1

D2622-120CP

Extrusion

**

60/314
B1x Sp 16-03-22

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

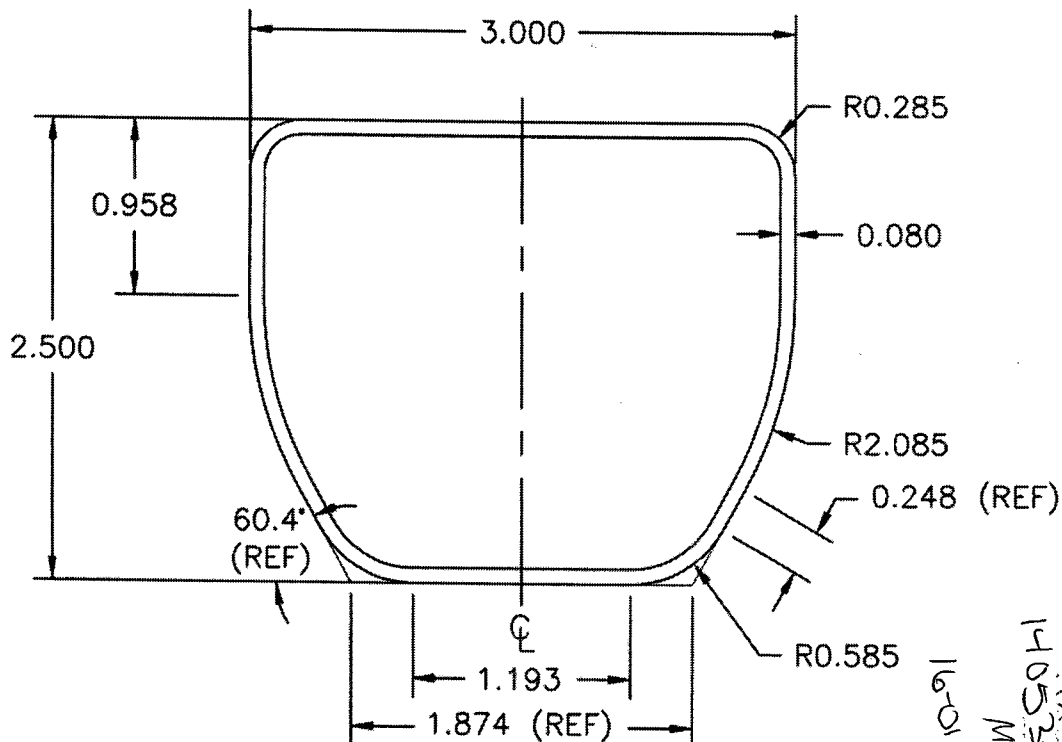
Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐																																																													
Date :		Step #:		QTY Effective :				MRB (QS1042) Approval																																																									
Description Work Order Deviation				Disposition				Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval																																																									
Root Cause		FAULT CATEGORY																																																															
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐	Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐	Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐	Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐	Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐	Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐	Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐	Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐	LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐	Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐	Past Expiry Date ☐	Manufacturing Process ☐	OTHER : _____			
Misidentified ☐	Past Due ☐																																																																



DESIGN KE	DRAWN BY CP	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED #	APPROVED #	DRAWING NO. D2622	REV. C SHEET 1 OF 1
DATE 02.09.11		TITLE STEP EXTRUSION	SCALE 1:1
A	96.11.29	NEW ISSUE	
B	97.12.12	CHANGE MATERIAL, ADD TOL. QSI	
C	02.09.11	0.080 WAS 0.085; ADD PART & DIE No.	
CI	# CP 02.10.04	ADD 'REV. A' TO DIE NUMBER.	

RELEASED
02.09.11 #



D2622-XXX STEP EXTRUSION

- 1) PART NUMBER IS D2622-XXX WHERE 'XXX' IS CUT LENGTH IN INCHES (EG. D2622-120 IS 120" LONG)
- 2) MATERIAL 6061-T6 (QQ-A-200/8)
- 3) MANUFACTURED USING BON=L DIE # 897123 REV. A
- 4) A SAMPLE FROM EACH BATCH WILL BE PULL TESTED TO ASTM STANDARD B221 BY AN APPROVED TESTING FACILITY TO ENSURE THAT THE BATCH MEETS THE MINIMUM MECHANICAL PROPERTIES STATED BELOW:

MINIMUM TENSILE YIELD STRENGTH = 35 ksi
MINIMUM ULTIMATE TENSILE STRENGTH = 38 ksi
MINIMUM ELONGATION = 8%

- 5) PART IS SYMMETRIC ABOUT CENTERLINE
- 6) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 7) ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED

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Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
Tel: 613 632 9577
Fax: 613 632 1053

PURCHASE ORDER

Purchase Order ID PO31027

Purchase Order Date 1/15/2016

PO Print Date 1/15/2016

Page Number 1 of 2

134536

Order From :

VC-BON001

Ship To : DART AEROSPACE LTD

SIGNATURE ALUMINUM CANADA INC.
C/O/ T10322C
P.O. BOX 4488, STN A
TORONTO, ON M5W 4H1
CA

1270 ABERDEEN
HAWKESBURY, ON K6A 1K7
CANADA

E-MAILED

Contact Name

Vendor Phone

905-427-6550

Ship To Contact

Ship To Phone

Ship Via:

Yours ppd

Ship Acct:

Buyer

Chantal Lavoie

Customer POID

Customer Tax #

10127-2607

Terms

Net 30

Currency

CAD

FOB

Destination-Collect

Line Nbr	Reference Vendor Part Number	Description/ Mfg ID	Req Date/ Taxable	CD	Req Qty/ Unit of Measure	PO Unit Price	Extended Price
	Line Comments		Promise Date				
	Delivery Comments						

1	D2500-1-190P	Ext'N -1' Beam Tube 4"	3/29/2016		82.00	\$86.68	\$7,107.76
			Yes		Each		
			3/29/2016				

EXTRUDE AS PER DWG D2500 REV. H
B140538

EXTREME CARE MUST BE TAKEN TO PROTECT THE OUTSIDE SURFACE OF TUBE
MATERIAL MUST BE SMOOTH AND FREE FROM DEFECT SCRATCHES,NICKS,DENTS

Line Total: \$7,107.76

2	D2622-120CP	Extrusion	3/29/2016		120.00	\$35.52	\$4,262.40
			Yes		Each		
			3/29/2016				

EXTRUDE AS PER DWG D2622 REV. C
B140539

EXTREME CARE MUST BE TAKEN TO PROTECT THE OUTSIDE SURFACE OF TUBE
MATERIAL MUST BE SMOOTH AND FREE FROM DEFECT SCRATCHES,NICKS,DENTS

Line Total: \$4,262.40

Note:

1/15/2016



ACCT# 46024

1850 Clements Road, Pickering Ontario, Canada L1W 3R8 INVOICING AND COMPANY LOCATION

Phone: (866) 587-5780 Fax: (905) 427-2207

Visit us at www.signaturealum.com

SIGNATURE ALUMINUM CANADA
1850 CLEMENTS ROAD
PICKERING ON L1W 3R8

PACKING LIST

PACKING LIST DATE / DATE DU
03-21-16PACKING LIST NUMBER / N° DE
025233SALES ORDER NUMBER / N° DE COM
122086REFER TO
THESE NUMBERS ON
ALL CORRESPONDANCEREFEREZ-VOUS A CES
NUMEROUS POUR TOUTE
CORRESPONDANCE

ERMS / FREIGHT

PP

SHIP TO / EXPÉDIÉ À DART AEROSPACE LTD. 1270 ABERDEEN ST. HAWKESBURY, ON K6A 1K7 CANADA PHONE: 613-632-5200		SOLD TO / VENDUE À DART AEROSPACE LTD. 1270 ABERDEEN ST. HAWKESBURY, ON K6A 1K7 CANADA PHONE: 613-632-5200		LOCATION PIC		TRAILER NUMBER / REMORQUE Nombre RT104		SALESMAN / VENDEUR 042		CREDIT REP / REP DU CRÉDIT 		SALES REP / REP. DES VENTES R. BLAIS	
CUSTOMER ID / ID DU CLIENT 46024		ORDER DATE / DE LA COM 01/15/16		CUSTOMER PO NUMBER / CLIENT PO Nombre PO31027		JOB / FICHIER 		FIELD SALES REP / REP REGIONAL DES VENTES G.ATTENBOROU		CUST SERVICE REP / REP. SERVICE CLIENTELE M2A			
BILL OF LADING NUMBER / NO. DE CONNAISSEMENT 025233		CARRIER / TRANSPORTEUR MCGILLION											
ITEM NO. / NUMÉRO	ORIGINAL ORDER QUANTITY / Quantité d'ordre ORIGINAL	UNIT / UNITÉ	PREVIOUS SHIPPED QUANTITY / PRÉCÉDENT Quantité livrée	MFG. PART NUMBER / MFG. PARTIE NUMÉRO CUSTOMER PART NUMBER / NUMÉRO DE RÉFÉRENCE DU CLIENT	ALLOY & TEMPER / ALLIAGE & TEMPER LENGTH / LONGUEUR CUTTING TOLERANCE / Tolérance de coupe	FINISH DESCRIPTION / DESCRIPTION DE FINITION ABRICATION DESCRIPTION / DESCRIPTION DE FABRICATIO SHIPPING TOLERANCE / EXPÉDITION TOLERANCE	NBR OF PKGS / NBR DE PKGS	GROSS LBS / LIVRES BRUT	NET QUANTITY / QUANTITÉ NETTE	UNIT / UNITÉ	QUANTITY DUE / Quantité en raison		
002	1,094 LB 496 KG 120 PC			DAA-897123-2 D2622-120CP	6061 T6 120.0000 IN Cut(+): 0.1180 Cut(-): 0.0000	Min: -10 % Max: 10 %	3	1,190 540	1,098 LB 498 KG 131 PC				
						861170 / 300747	1	423	392		47 PC		
						861170 / 300748	1	384	353		42 PC		
						861170 / 300749	1	384	353		42 PC		

SP/16-03-22

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		Continued	
TOTALS			

Transportation/Traffic damages and/or shortage claims are to be noted on the delivery copy of sellers shipping packing lists and signed and dated below by customers authorized representatives.
No return materials will be accepted for credit without permission. The articles and/or services covered by this shipping packing list were produced in accordance with the following standards set of 1999 as amended. Order separated subject to the terms and conditions stated on the reverse side.

CUSTOMER ACKNOWLEDGEMENT OF GOODS DELIVERED AND CONDITION

DATE OF DELIVERY

DRIVER



CERTIFICATE OF COMPLIANCE

SIGNATURE ALUMINUM CANADA

1850 CLEMENTS RD
PICKERING, ON L1W 3R8

Cert Date	Cert No.	Sales Order	Page
03/18/2016	5380893	122086	1
Cust PO	B/L No	Lot	Date
PO31027	025233	861170	03/21/16

Sold To		Ship To	
46024 DART AEROSPACE LTD. 1270 ABERDEEN ST. HAWKESBURY, ON K6A 1K7 CANADA		46024 DART AEROSPACE LTD. 1270 ABERDEEN ST. HAWKESBURY, ON K6A 1K7 CANADA	
Item No	Part No	Item Description	Cust Part
002	DAA-897123-2	10FT MILL 6061 T6	D2622-120CP
Gross Weight	1,190 LBS		
Net Qty	1,098 LBS 131 PCS 3 PKGS		
Specification		Die Desc	
AMS-QQ-A-200/8 & ASTM B221-08			

Mechanical Tests:

Tensile	Yield	% Elongation	Conductivity	HRE
MPA / KSI	MPA / KSI			
293.8 / (42.6)	262.1 / (38.0)	(8.5)	N/A	(90)

Chemical Analysis:

Si	Fe	Cu	Mn	Mg	Cr	Zn	Ti	V	Zr
0.63	0.25	0.22	0.06	0.89	0.07	0.04	0.02	0.01	0.00

This Material is Made in Canada

This Material is RoHS Compliant

This will certify that the material described herein has been inspected and tested in accordance with Signature Aluminum Canada's standard sampling and testing procedures or in accordance with the requirements of any specification forming a part of the material description to the extent indicated herein. Data of chemical composition for the material and test results from samples representative of the material are set forth above hereof or in any attachments hereto. This information shows that the material meets the applicable requirements. Inspection and test records are maintained on file. This certificate shall be deemed apart of and subject to the terms and conditions of warranty set forth on the reverse side of our order acknowledgement form. No other warranties are applicable.

S. Mazzotta
Director of Quality
Signature Aluminum Canada Inc



ISO 9001/TS16949 Registered Company

Visit us at www.signaturealum.com

MATERIAL RECEIPT INSPECTION FORM

MATERIAL: D2622-120C
 DATE: 16-03-24

PO / BATCH NO.: P031027/B140539

MATERIAL CERT REC'D: yes
 QUANTITY RECEIVED: #5131
 QUANTITY INSPECTED: 151
 QUANTITY REJECTED: 0

THICKNESS ORDERED: .080
 THICKNESS RECEIVED: .090
 SHEET SIZE ORDERED: N/A
 SHEET SIZE RECEIVED: N/A

DESCRIPTION	NCR (Check Y/N)		COMMENTS
SURFACE DAMAGE	Y	(N)	
CORRECT FINISH	(Y)	N	
CORROSION	Y	(N)	
CORRECT GRAIN DIRECTION	(Y)	N	
CORRECT MATERIAL	(Y)	N	
CORRECT THICKNESS	(Y)	N	
PHOTO REQUIRED	Y	(N)	
CORRECT MATERIAL	(Y)	N	AMS-QQ-A-200/3
CORRECT REF # TO LINK CERT	(Y)	N	P031027
CORRECT MATERIAL IDENTIFICATION	(Y)	N	
CORRECT M# ON THE MATERIAL	(Y)	N	
DOES THIS MATERIAL REQUIRE ENGINEERING SIGN OFF	Y	(N)	
DOES THIS REQUIRE AN EXTRUSION REPORT	Y	(N)	

CUT SAMPLE PIECE OF MATERIAL AND PREFORM A HARDNESS CHECK. RECORD RESULTS BELOW				
TYPE OF MATERIAL	HRC	HRB	DUR A	DUR D
SIZE OF TEST SAMPLE				
HARDNESS / DUROMETER READING				

testers located in the Quality Office

QC 18 INSPECTION	ENGINEERING SIGNOFF (if required)
INSPECTED BY: <u>9</u> DATE: <u>16-03-24</u>	SIGNED OFF BY: _____ DATE: _____

Attach this inspection sheet with the corresponding material cert and remit to be scanned and received in

MATERIAL RECEIPT INSPECTION FORM

INSTRUCTIONS FOR INSPECTING BAR, TUBING, ROUND, & SHEET STOCK

- 1- VERIFY STOCK TO DART PURCHASE ORDER
- 2- MEASURE ALL DIMENSIONS FOR EACH PURCHASED STOCK
 - a. WIDTH, THICKNESS, DIAMETER, WALL THICKNESS & LENGTH
- 3- VERIFY CONDITION OF MATERIAL i.e. DAMAGED, CORRODED, etc.
- 4- VERIFY THAT SUPPLIER HAS A NUMBER (HEAT #) ON ITS RECEIVING REPORT TO LINK TO MATERIAL CERTS
- 5- VERIFY MATERIAL CERTS ARE CORRECT TO THE DART PO INSTRUCTIONS
- 6- REMOVE / CUT A PIECE OF MATERIAL FOR SAMPLE HARDNESS TESTING

INSTRUCTIONS FOR INSPECTING SKIDTUBE & STEP EXTRUSION

- 1- VERIFY TO DART SUPPLIED DRAWING
- 2- SAMPLE INSPECT MATERIAL IN BUNDLE TO ENSURE MATERIAL CAN BE RECEIVED INTO DART
- 3- USING PORTABLE HARDNESS TESTER VERIFY HARDNESS OF THE MATERIAL TO THE DRAWING
- 4- VERIFY THAT MATERIAL CERTS MATCH TO WHATS CALLED UP ON THE DART DRAWING

AFTER MATERIAL PASSES INSPECTION

- 5- HAVE DART EMPLOYEES START STOCKING MATERIAL BUT REQUEST MIN **20pcs** FOR FULL INSPECTION
- 6- INSPECT ALL DIMS AS PER DRAWING REQUIREMENTS

INSTRUCTIONS FOR INSPECTING CROSS TUBE MATERIAL

- 1- VERIFY MATERIAL CERTS MATCH THE REQUIREMENTS ON THE DART DRAWINGS
- 2- INSPECT MIN. HALF THE BATCH OF EXTRUSION RECEIVED INTO DART
- 3- INSPECT MATERIAL AS PER THE EXTRUSION REPORT
 - a. WALL THICKNESS USING ULTRA-SONIC IN 4 LOCATIONS
 - b. OUTSIDE DIAMETER HIGHEST/LOWEST BOTH ENDS
 - c. INSIDE DIAMETER HIGHEST/LOWEST BOTH ENDS
 - d. STRAIGHTNESS @ CENTER OVER 12" SPAN
 - e. WALL THICKNESS USING TUBE MICROMETER HIGHEST/LOWEST BOTH ENDS
- 4- IDENTIFY EACH TUBE IN SEQUENCE OF INSPECTING (TUBE 1, TUBE2.....) AND W/O# AND PO#
- 5- RECORD ALL FINDINGS ON EXTRUSION REPORT

IF ANY QUESTIONS PLEASE SEE QC COORDINATOR BEFORE GOING FURTHER